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ABSTRACT

A leader's legitimacy through election or appointment has been found to create differing relationships with followers, resulting generally from greater expectations for an elected leader. To compare the authority and influence of elected and appointed leaders, 140 students were recruited to participate in research on "urban planning." They were organized into 35 four-person, same-sex groups. All subjects read a description of an imaginary city as background for a debate about urban planning programs emphasizing three problem areas: beautification, education, and welfare. Leaders were either elected or appointed. Low participators were given information supporting their position. Two kinds of dependent measures were used: (1) an observational measure, consisting of each individual's percentage of total group speech as an indicator of influence; and (2) the ratings of group members on a post-interaction questionnaire. Percentage of total group speech indicated significant differential effects of appointment and election on men and women leaders. Men held a higher percentage of speech under the elected conditions, while women did so under appointed conditions. Competence ratings yielded the same interaction pattern. The correlation of influence ratings with percentage of speech for appointed or elected leaders yielded significant sex differences; for females there were substantial positive relationships, while for males these were zero or negative. (JAC)

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Leader Legitimacy and Influence in Female and Male Groups*

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ABSTRACT

An experiment on leader source of authority and influence involving 35 four-person, same-sex discussion groups was conducted to test several hypotheses. The major one, following on earlier work, was that elected leaders would be more influential than appointed leaders. Percentage of total group speech showed significant differential effects of appointment and election on men and women leaders: Men held a higher percentage of speech under the elected conditions, while women did so under appointed conditions. Competence ratings yielded the same interaction pattern. The correlation of influence ratings with percentage of speech for appointed or elected leaders yielded significant sex differences; for females there were substantial positive relationships, while for males these were zero or negative. Implications are indicated for further research.

*Presented on August 28, 1983 at the Annual Convention of the American Psychological Association in Anaheim, California.

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Leader Legitimacy and Influence in Female and Male Groups

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Background and Problem

A leader's legitimacy through election or appointment has been found to create differing relationships with followers. Such differences result in general from a greater investment in, and higher expectations for, an elected leader than an appointed one (Hollander & Julian, 1970, 1978). On the one hand, the elected leader has the potential for gaining a responsive following, and being evaluated more favorably when he or she shows competence in achieving group goals. On the other hand, the elected leader is more vulnerable to withdrawal of follower support if perceived to be the cause of the failure to attain group goals (Hollander, Fallon & Edwards, 1977). Therefore, differential ratings of elected and appointed leaders reflect a basis in perceptual judgments tied to the leader's legitimacy from the source of his or her selection (cf. Knight & Weiss, 1980). This differential effect has been further borne out in recent research by Ben-Yoav, Hollander and Carnevale (In Press); they found that elected leaders, compared to appointed leaders, were perceived by followers to be more positive on a number of dimensions, including responsiveness to followers' needs, interest in the task, competence, and also were preferred as leaders for similar tasks in the future.

An additional line of work has variously indicated that women may be seen as more suitable for the elected leader role than for the appointed one, while men may be seen as appropriate for both (Eskilson & Wiley, 1976; Fallon & Hollander, 1976). Eagly's (1978) analysis suggests that this may be a consequence of the socialization of women toward greater accommodation in interaction, which more nearly fits the elected leader role. Eskilson and Wiley (1976) say that women

who are appointed leaders are less likely than men to feel it is their due, but women who are elected feel comfortable, as do men, by being legitimated by their peers. Whether elected or appointed, however, women leaders of either kind are usually rated less competent than men leaders, even by women (Hollander & Yoder, 1980). Also, Eskilson and Wiley (1976) found that women leaders are less likely to choose themselves as leaders for similar groups in the future.

Mulder (1960, 1971) suggests that an individual's participation, and through this their status within a group, is affected by the amount of relevant information they possess for the task at hand. Greater information acts to provide a basis for being more independent in group discussion. This may create an assertion of influence which is similar to the behavior of the appointed or elected leader.

The major hypotheses, in the experiment to be reported with same-sex groups, were as follows:

1) Elected leaders would exert more influence on group judgments than appointed leaders across gender.
2) The difference in influence between elected and appointed women leaders would be greater than that for elected and appointed men leaders.
3) Both kinds of men leaders would be rated more competent than both kinds of women leaders.
4) Women leaders would rate themselves lower on willingness to continue as leader for similar groups in the future.
5) A group member, other than the leader, when given additional relevant information, will be more influential than those other members who are not given such information.

The design was a 2 x 2 with leaders being either appointed or elected and the groups consisting entirely of either males or females. The individuals

in all the groups who participated least in a "warmup" discussion were given relevant information to help in support of a position they had taken.

Subjects and Procedures

A total of 140 male and female undergraduate students in equal proportions came from introductory psychology classes at the State University of New York at Buffalo. They were recruited to take part in research on "Urban Planning," to fulfill a course requirement for research participation. Their modal age was 19. In this research, they were organized into four-person same-sex groups. Two male and two female Experimenters were used, with the E always being of the same sex as the Ss, so as to avoid any cross sex experimenter bias.

All Ss first read a 700 word description of an imaginary city called "Colossus" as background for a debate about urban planning programs. They were then given a sheet listing three problem areas, Beautification, Education, and Welfare. Each of these problem areas had four action programs listed below them, which the Ss were asked to rank according to their likelihood of acceptance and success. Ss then rank ordered the three problem areas according to the importance they felt each had in urban planning.

These sheets were collected and the Ss then engaged in a general discussion of from 5-10 minutes about organizing their group to gather information most efficiently, and about the relative importance of the three problem areas. After the group had reached agreement on the latter concern, within 10 minutes, the experimenter then tallied participation rates for the group members. For the groups in the appointed conditions the low participators were then given information that helped to support one of their positions in their ranking of the action programs. For groups in the elected conditions, before this was done members were first given ballots to rank order the other individuals in the group as to preference for leader. Then the low participators were given the additional information. In the elected groups, the information given was

in support of the low participator but was in opposition to the person chosen as leader. In the appointed condition, this information was in opposition to the highest participator in the initial discussion. In all groups, the members other than the low participator did not receive any new relevant information.

After Ss had read the information sheets the experimenter then either appointed the high participator as leader for the group, or informed the individual who had received the highest rating from the group members that he/she had been elected as leader for the group. The group was then asked to reach agreement on the rank ordering of the action programs for each of the three problem areas. This was done individually for each area; in all cases the area on which the informed member received information was discussed in the second discussion period. A tally was kept for participation rates within each discussion, and the group ranking was collected.

Once all three problem areas had been discussed the Ss were given another listing of the three problem areas and their action programs. These were filled out individually, without discussion among members. A post-interaction questionnaire was then circulated in which members were asked to rate themselves and the other individuals within the group on nine dimensions. Thereafter a full debriefing occurred.

Two kinds of dependent measures were used in this experiment. The first was observational, consisting of the percentage of the total group speech an individual accounted for in each discussion. This measure was taken to be an indicator of the individual's influence, since research by Riecken (1958), Sorrentino and Boutillier (1975), and Stein and Heller (1979) suggests that quantity of participation is a good predictor of influence. The other measure used was the ratings group members gave on the post-interaction questionnaire items.

Findings

Results from the percentage of total speech for the leaders are shown in Figure 1. As can be seen there, the men and women were affected differentially by the source of legitimacy for their role as leader. This shows up in a significant interaction of source of legitimacy and subject sex, ($F=5.84$, $df=1,31$, $p<.03$). It will also be noticed that the diversity is greatest in the second discussion, the one where the relevant information was given to the informed member. This again shows up as a significant interaction for discussion by source of legitimacy by subject sex ($F=4.37$, $df=2,62$, $p<.02$). The second discussion yields a significant interaction of source of legitimacy by subject sex ($F=10.54$, $df=1,31$, $p<.01$), for percentage of the total group speech in that discussion.

In terms of hypothesis one, there is partial support for the prediction of greater influence for the elected leaders. The males exhibit this trend and show the greatest disparity across the three discussions. The females, however, show an opposite trend; they have a greater portion of the speech when they are appointed. This suggests that, perhaps because of the authority coming from an outside or external agent, the female group members defer to this external agent.

As for hypothesis two, there is no indication that females are affected more by their source of legitimacy for the leader role. In fact, it is the males not the females who show the greatest disparity across the conditions. The differences between the elected and appointed males for the second discussion yield a significant two-tailed t test ($t=2.91$, $df=67$, $p<.01$), as do the differences for the third discussion ($t=2.11$, $df=67$, $p<.05$). The females show no significant differences but they do have a trend in the opposite direction for the second discussion ($t=1.95$, $df=67$, $p<.10$).

Table 1 shows the means for the influence ratings on the post-interaction questionnaire. All rating scales were from 0 to 5, at the high end. As indicated, the elected leaders were perceived by the group members to have greater influence than the appointed ones. Again, while the differences are not significant, it is interesting to note that the males showed a larger effect than did the females. Also noteworthy is the fact that the leaders generally were perceived to have greater influence than any other group member, while the informed members were perceived to have the least. This showed up in a substantial main effect for group member ($F=22.79$, $df=3,93$, $p<.001$).

In a companion analysis, the influence ratings for leaders were correlated with their percentages of speech. An r of .41 ($n=35$, $p<.02$) was obtained. Separate correlations were then calculated, using a Spearman rho to take account of small ns, for male and female leaders under appointment and election conditions. The rhos were: .05, male-appointed; -.43, male-elected; .78, female-appointed; and .55, female-elected. Not only was the correlation for the female-appointed leaders significant beyond the .05 level, but also the correlations for the male and female leaders showed significant differences from each other under both appointment and election. Hence, this revealed a significant sex effect at or beyond the .02 level.

The means for the competence ratings are shown in Table 2. Contrary to expectation, there is no main effect for subject sex. The females did not show lower ratings than the males. Instead there is a trend for an interaction of source of legitimacy by subject sex ($F=3.01$, $df=1,31$, $p<.10$). This reflects the same trend found in the percentage of speech. The males showed higher competence ratings under elected conditions, while the females showed higher ratings under conditions of appointment. Once again, there was also a substantial main effect for group

member, reflecting the higher ratings of the leaders and the lower ratings of the informed members ($F=12.55$, $df=3,93$, $p<.001$).

The ratings of the leaders for willingness to continue as a leader in similar groups in the future are shown in Table 3. Again, contrary to expectation, there were no sex effects. Instead a significant main effect for source of legitimacy was found ($F=6.02$, $df=1,31$, $p<.02$). This reflects the fact that the appointed leaders, regardless of sex, were more willing to continue as leader in the future. Also to be noted is the fact that the appointed leaders rated themselves the highest on this dimension, while the elected leaders tended to rate another group member as highest.

Regarding hypothesis five, the informed member did not show any significant differences in speech percentages from the other members. However, it is interesting to note that the second discussion produced the greatest disparity among the leaders. It is also noteworthy that the ratings of influence correlated significantly with the percentage of speech in the second discussion for the informed members ($r=.52$, $p<.01$), but did not do so for the third discussion. This suggests that the second discussion was evidently crucial to the group's perception of the informed member.

Implications and Conclusions

Although the first hypothesis concerning differences from source of legitimacy was not supported, this variable did interact significantly with gender. Hence, appointment or election had the opposite effect for male as against female groups: elected male leaders showed the expected trend of greater potential influence, as measured by percentage of total group speech, than appointed male leaders; for female leaders, this result was precisely the reverse. The greatest source of legitimacy discrepancies occurred in the male groups, and not as expected in the female groups. A comparable result,

in the same direction, was found for the post-interaction ratings of leader competence in the comparison of elected and appointed leaders who were male or female. Furthermore, for the post-interaction questionnaire ratings of leader influence, correlated with percentage of speech, there was a distinctly significant effect of sex. Female leaders who spoke more were rated higher, while for male leaders the relationship was negative under election and zero under appointment.

While the differences between the elected male and female leaders in percentage of speech are small and nonsignificant, it is interesting that the differences between the appointed male and female leaders are much greater and reach significance in the second and third discussions. The appointed female leaders parallel the elected male leaders and are only slightly greater than the elected female leaders. This may suggest that the three groups are all reading the situation in a similar manner. The appointed male leaders, on the other hand, seem sensitive to their outside source of legitimacy and act accordingly. Also of interest is the fact that while the appointed male and female leaders are significantly separated in their percentage of speech, they both rate themselves highest on the question concerning willingness to be leader again for similar groups. Thus, they are both in one sense perceiving themselves as most competent for the job, but females are more ascendant with regard to speech, while the males appear to be yielding more to the group.

Concerning the effect of the relevant information on the informed member and the group, the second discussion clearly had a profound impact on the group. It is for this discussion that the greatest discrepancies occur for the leaders in terms of percentage of speech. Obviously something was occuring to drive the groups apart. Also, it is noteworthy that the informed member's influence and competence ratings correlated significantly with the second discussion, while

being nonsignificant in the third. This reveals that the information did have its effect upon the informed member.

Altogether, the findings are notable in pointing up some intriguing interactions of source of legitimacy and sex. There is, of course, a special case here insofar as all of the groups were of same-sex composition. Attention should be paid to the possibility that the leader role in such same-sex groups has particular characteristics which may limit generalization to mixed-sex groups. One consideration here is that we found females were significantly ($p<.01$) more similar in their initial individual rankings of the action programs than were the males. As usual, further research in this vein seems eminently desirable.

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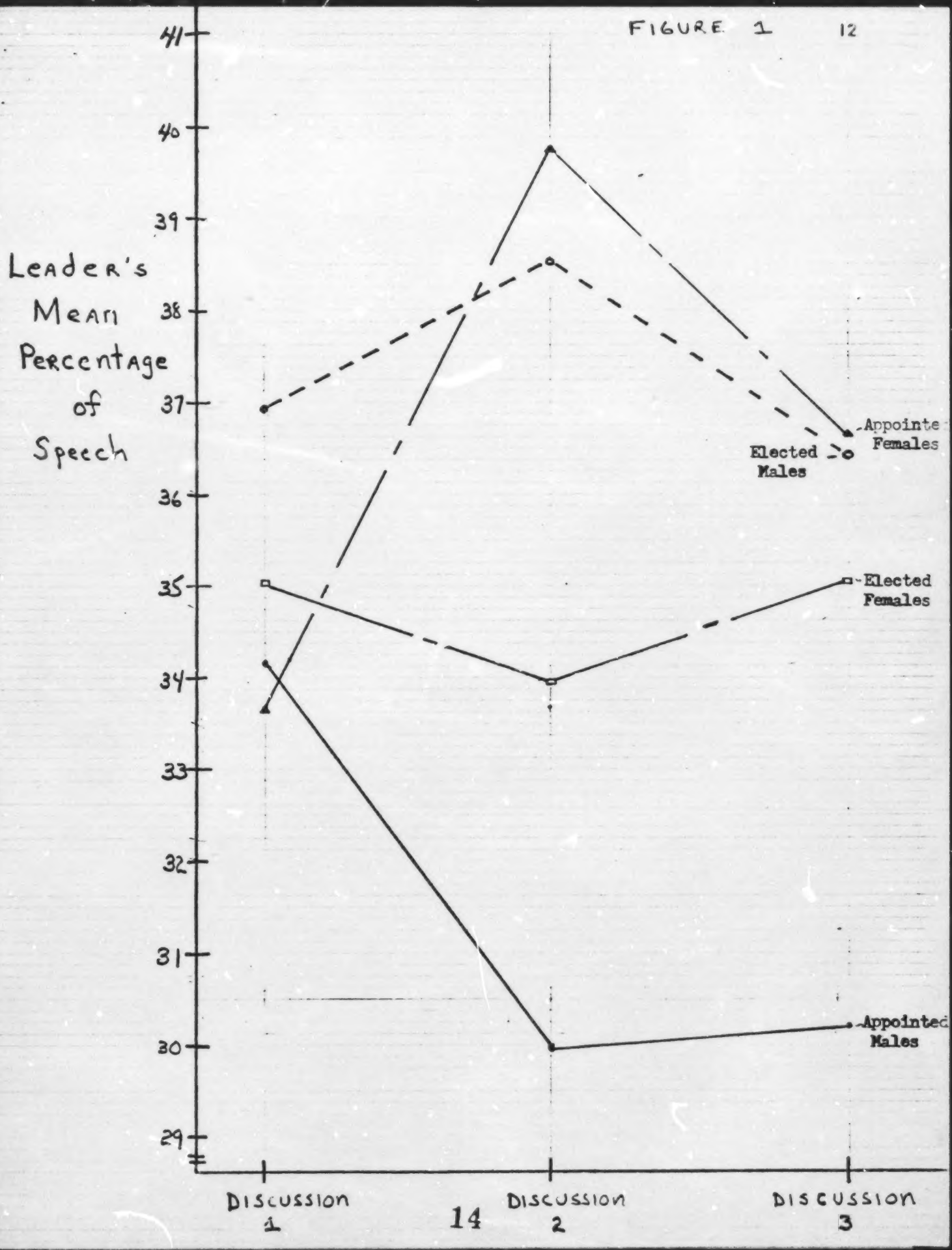
FIGURE 1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Leader's Mean Percentage of Speech
Appointed Females
Elected Males
Elected Females
Appointed Males
DISCUSSION 1
DISCUSSION 2
DISCUSSION 3

Table 1

Mean Influence Ratings on

Post-Interaction Questionnaire

	Condition				
	Appointed		Elected		
	Group Composition				
	Male	Female	Male	Female	
Leader	3.70	3.73	4.00	3.83	3.81
Informed	2.52	1.90	2.04	2.71	2.28
Second	3.26	3.40	3.29	3.13	3.28
Third	2.96	2.73	2.83	3.25	2.94
	3.11	2.94	3.04	3.24	3.08

Table 2

Mean Competence Ratings on

Post-Interaction Questionnaire

	Condition				
	Appointed		Elected		
	Group Composition				
	Male	Female	Male	Female	
Leader	3.96	4.00	4.25	3.75	3.99
Informed	3.22	3.30	2.67	3.38	3.15
Second	3.78	4.00	3.63	3.67	3.78
Third	3.56	3.57	3.17	3.79	3.52
	3.63	3.72	3.43	3.65	3.61

Table 3

Leaders' Mean Post-interaction Questionnaire Ratings of Self and Other Group Members on Willingness to Have as Leader in Future

	Condition				
	Appointed		Elected		
	Group Composition				
	Male	Female	Male	Female	
Self	4.33	4.20	3.63	3.75	4.00
Informed	3.11	2.20	2.25	2.75	2.57
Second	4.11	4.00	3.75	3.50	3.86
Third	3.44	3.60	3.25	4.25	3.63
	3.75	3.50	3.22	3.56	3.51